



Gaming PCs

When it comes to games, a powerful PC can wipe the floor with the current consoles and offers a flexibility that even the new batch are unlikely to match. We test six systems built for pure pleasure

With the news full of hype about the latest batch of games consoles from the likes of Sony, Nintendo and Microsoft, it's easy to forget that one of the most powerful gaming systems available is the Windows PC. Today's PCs produce 3D graphics that effortlessly surpass those of the PlayStation 2 and Xbox and will pose a serious challenge for even the new systems due to launch within the next year.

Unlike games consoles, which tend to be revolutionary when launched but whose power dwindles over time, a gaming PC can always be at the cutting edge of technology. Better still, new technologies such as nVidia's SLI and ATI's CrossFire will allow you to keep your gaming system up to date for some time to come.

This month we've assembled a group of six gaming PCs. Each one can produce 3D graphics of breathtaking quality at staggering frame rates,

making the latest games such as Battlefield 2 and Doom 3 look so realistic that you'd swear you were really battling zombies or flying over the desert. All come with high-resolution LCD displays and surround-sound speakers, and every one has at least 1GB of memory. Many even have the latest dual-core processors, which can double the power available for some tasks. If gaming is your passion, we'll help you find the ideal PC.

IN THIS REVIEW

Demonite OverX64 CrossFire
Evesham Axis 64 Decimator GT
Gladiator Trident X2 3800 Platinum Package
Mesh Xtreme CSX
PC Nextday Zoostorm 5-7401 Gaming PC
Watford Aries PowerXS 6446 X2 SLI





CHOOSING A... GAMING PC

For a gaming PC you need components that pack a wallop. Here's what to look out for if you want the ultimate gaming experience

When choosing a gaming PC, your criteria will be slightly different from those we usually advocate in *Computer Shopper*. Rather than choosing a PC with a balance of Windows and 3D performance, you should concentrate on out-and-out 3D speed. Similarly, you'll select other components, such as the monitor and sound equipment, based on what's best for gaming rather than general use. In this guide we explain what to look for.

3D SPEED

To make the most of 3D games you need a PC with one, or even two, powerful 3D graphics cards. We run our standard Doom 3 test at fairly modest settings – 1,024x768 resolution and high quality – because not all our readers are games enthusiasts. Consequently, a PC aimed at hard-core gamers should walk through this test at over 75 frames per second (fps).

As a gaming fan, you'll want to run your games with higher settings that make them look as realistic as possible. To that end, we ran a second Doom 3 test on every PC in this month's group. We ran this second test at the native resolution of the monitor included with each PC. This produces a picture that is absolutely pixel perfect, but it means that some PCs had to work harder than others. The Demonite system, for example, with its 1,600x1,200-resolution screen, had to produce almost 50 per cent more pixels per frame.

To make the test even more realistic, we increased Doom 3's detail level to the demanding Ultra setting, which is as high as it goes. We also added 8x anti-aliasing and 4x anisotropic filtering to round off any jagged edges in the picture. These are the minimum settings we would expect any serious games fan to use and give the best impression of how well each PC will run your favourite games.

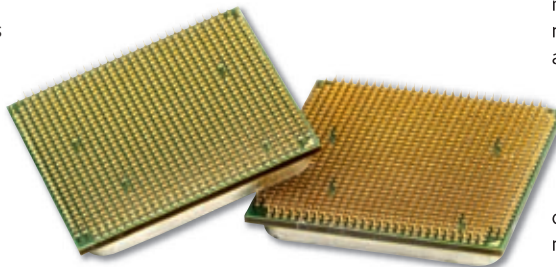
DUAL CARDS

Today's 3D graphics cards are more powerful than ever before, but two of the PCs in this group have gone one better by using two cards in a single PC. Demonite's OverX64 CrossFire uses two ATI X850XT cards to produce stunning frame rates in 3D games, and PC Nextday's SLI system ran our tests even faster using two GeForce 7800 GT cards.

It's also worth noting that three of the other PCs, from Evesham, Mesh and Watford, have a spare PCI Express x16 slot for another graphics card. This will enable you to add a second nVidia graphics card later, almost doubling the 3D power available.

TWO CORES

Some manufacturers have chosen to double up the processors in their systems, too. The Evesham, Gladiator, Mesh and Watford PCs all use AMD



▲ Upgrading from a single-core to a dual-core processor is possible as they fit into the same socket

Athlon 64 X2 dual-core processors, which are, in effect, two processors on a single chip.

These PCs are incredibly fast in applications such as our video benchmark, which can use both cores at once. This helped them produce scores in our *Shopper* benchmark suite that are much higher than those of any single-core chip. It's important to



▲ It may not be much bigger, but the 20" monitor (left) has a huge 1,600x1,200 resolution

note, though, that no current games use both processor cores, so at the moment a dual-core processor is an expensive luxury rather than a benefit for games. Single- and dual-core processors use the same motherboard socket, so you could upgrade from a single-core processor to a dual-core one in the future.

MONITORS

A bigger monitor makes gaming more fun, and this month every PC includes at least a 19" LCD monitor. Demonite has gone one better by bundling a 20" screen. This may sound like a small difference, but the larger screen has almost 50 per cent more pixels, giving you a lot more detail onscreen.

Size and resolution aren't everything, though. When gaming it's important that your monitor can keep up with the frames your graphics card sends it, so look for a screen with a low pixel response time. All the displays in this group have a response time of 16ms or less. In our tests we found them all acceptably good for gaming, but the screens with a response time of 8ms or lower were best during frantic onscreen action.

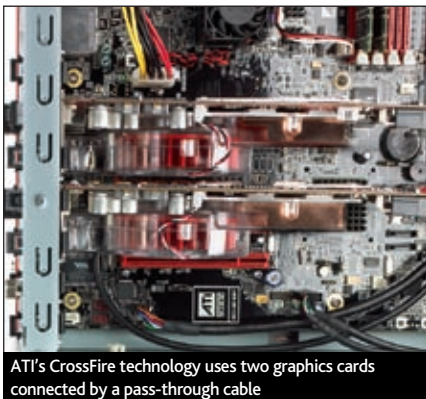
AUDIO

All the PCs in this test include a set of surround-sound speakers. We usually prefer to see stereo sets with PC systems, but for gaming it's worth taking the time to set up several speakers for immersive surround sound. Some speakers are better than others, though, and we particularly like the Creative Inspire T7900 sets that Evesham, Gladiator, Mesh and PC Nextday include with their systems.

Evesham, PC Nextday and Watford also supply a Sound Blaster Audigy 2 ZS sound card. This allows games to use advanced EAX 4.0 audio modelling, which alters sound effects according to the acoustics of the environment your game character is in.

CONTROLS

Finally, look out for any useful game controllers that come with each PC. Gladiator has included a dedicated gaming mouse and keyboard, both of which are great if you like to play first-person shooter (FPS) games. PC Nextday has added a pair of joypads, and Mesh has included a force-feedback joystick that's perfect for flight simulators.



ATI's CrossFire technology uses two graphics cards connected by a pass-through cable



Two hard disks in a RAID 0 array will speed up game loading times



DEMONITE

OverX64 CrossFire

RATING ★★★★★

PRICE £1,499 inc VAT

SUPPLIER Watford 08700 270900

DETAILS www.savastore.com

CrossFire is ATI's dual graphics card technology, similar to nVidia's SLI. This is the first CrossFire PC to take part in a *Shopper* Labs test.

FEATURES

The bright red chassis is actually a CoolerMaster case covered in a red plastic film to match ATI's logo. Inside are two ATI X850XT graphics cards. These look dangerously close together, but a clever cooling system ensures they don't overeat by pushing hot air out of the back of the case.

A double-card system is expensive, but Demonite has somehow found the money to add a 20" monitor from NEC, too. Although it's only an inch larger than a 19" screen, it has a far superior 1,600x1,200 resolution. This means almost 50 per cent more pixels, and you really notice the extra detail when playing games. The monitor also has a twisting base and is easy to adjust to a comfortable height.

A single DVD writer, 5.1 surround-sound speakers and Microsoft keyboard and mouse are also included. We'd hoped for a larger hard disk than the 200GB one included here, though.

PERFORMANCE

The single-core processor here is outperformed by the dual-core chips in other systems for tasks that use both cores at once, such as video-encoding. Its score of 119 in our 2D benchmarks was the lowest in the group, although the Demonite will still fly through everyday tasks.

In today's games a single-core processor is no handicap, and the OverX64's CrossFire is very powerful. It ran our Doom 3 test at 98.3fps, and produced 68fps with the same game running at the NEC monitor's native resolution.

VERDICT

The Demonite is a powerful gaming system with a fantastic monitor. Its hard disk is small, though, and those who want the maximum 3D power should pick the PC Nextday system.

✓ High-resolution monitor; powerful dual-card graphics system

✗ Single-core processor; small hard disk

SPECIFICATIONS AMD Athlon 64 3800+ processor, 1GB RAM, 200GB hard disk, 2x 256MB ATI Radeon X850XT graphics, DVD+/-RW +/-DL, 20" LCD



EVESHAM

Axis 64 Decimator GT

RATING ★★★★★

PRICE £1,499 inc VAT

SUPPLIER Evesham 08701 609500

DETAILS www.evesham.com

Several manufacturers have submitted gaming PCs in stylish metal cases. Evesham has chosen its standard 'silver splat' design, but it's what's inside that counts.

FEATURES

Evesham's choice of monitor is exciting. The Viewsonic VX924 has a response rate of 4ms, making it one of the fastest on the market. We found it very hard to differentiate between this and the more common 8ms VX912, but it's still a great monitor for gaming. It performed well in all our colour and contrast tests.

A set of Creative T7900 surround-sound speakers is included, as is a Sound Blaster Audigy ZS sound card. This combination is great for gamers, providing surround sound and advanced EAX sound effects. The Microsoft wireless mouse and keyboard aren't so good for gaming, though.

Evesham provides an excellent warranty with two years of onsite service. This is bettered only by the Mesh PC, which comes with three years of onsite cover.

PERFORMANCE

The system is powered by a dual-core Athlon 64 X2 4200+ processor. This is fast in applications such as our video-editing test, which can use both cores at once. Its score of 157 in our *Shopper* benchmarks places it in the middle of this group.

The nVidia GeForce 7800 GT graphics card ran our Doom 3 test at 89.8fps and produced 61.9fps at the monitor's native resolution, but the other PCs have more powerful SLI, CrossFire or 7800GTX systems.

VERDICT

Evesham's PC is well built and powerful, but it can't keep up with the competition in this group. Its display and warranty are great, but you can buy a faster computer without spending more.

✓ Great warranty; good monitor and sound card

✗ Dull looks; limited 3D power

SPECIFICATIONS AMD Athlon 64 X2 4200+ processor, 1GB RAM, 320GB hard disk, 256MB nVidia GeForce 7800 GT graphics, DVD+/-RW DL, DVD-ROM, 19" LCD



GLADIATOR

Trident X2 3800 Platinum Package

RATING ★★★★★

PRICE £1,499 inc VAT

SUPPLIER Gladiator 08456 444666

DETAILS www.gladiatorcomputers.com

Gladiator's PC is built into a gorgeous metal case and is full of well-chosen components.

FEATURES

The Gigabyte case's silver finish, blue lighting and thoughtful layout make it both stylish and practical. The Saitek keyboard has backlit blue keys, so it's perfect for playing in the dark and looks great. A Raptor gaming mouse is also included. This has a very accurate sensor and its own mouse mat designed to give extra precision.

Best of all, though, is the Sony 19" LCD display. It looks amazing and has a gloss coating on the screen that makes colours appear more vibrant. It's superb when playing games in a darkened room.

We were disappointed to see that Gladiator had not included an SLI-compatible motherboard. This would have allowed a significant graphics upgrade in the future.

PERFORMANCE

Gladiator has fitted an AMD Athlon 64 X2 3800+ processor to this system, as well as 2GB of RAM. This processor usually runs at 2.0GHz, but here it has been overclocked to 2.2GHz. The chip is very fast for tasks that use both cores, such as our video-encoding test, but is slower when using only one core. It scored an impressive 160 overall in our *Shopper* benchmarks.

Like the Mesh and Watford PCs, the Trident X2 uses an nVidia GeForce 7800 GTX graphics card. This has been overclocked to make it faster. It outperformed the other GTX systems, running our standard Doom 3 test at 95.1fps and our native-resolution test at 73.8fps.

VERDICT

Gladiator's PC looks great and is pretty powerful, but its not quite as fast as the Demonite or PC Nextday systems.

✓ Decent performance; quality peripherals

✗ No SLI upgrade possible

SPECIFICATIONS AMD Athlon 64 X2 3800+ processor, 2GB RAM, 250GB hard disk, 256MB nVidia GeForce 7800 GTX graphics, DVD+/-RW +/-DL, 19" LCD



MESH Xtreme CSX

RATING ★★★★★

PRICE £1,499 inc VAT

SUPPLIER Mesh 08700 464747

DETAILS www.meshcomputers.com

Last month Mesh stormed to victory in our PC labs test, so we had high hopes for the Xtreme CSX. Sadly, it can't keep up with the best here.

FEATURES

The Xtreme CSX's jet-black case looks about as menacing as a PC can get. Behind the solid metal door lies an expanse of black grills that are backlit with blue LEDs. There's also a series of amusing but pointless speedometer-style dials showing system information. The whole PC is well built and has plenty of room for upgrades.

Mesh has paired this case with an 8ms VX912 Viewsonic monitor. This is an excellent screen for gaming. In fact, we found it very difficult to distinguish between this and the 4ms VX924 that comes with the Evesham PC.

A Logitech wireless keyboard and mouse are included, but we would prefer to see a wired set for gaming. A force-feedback joystick is also included, which is perfect for flying helicopters during *Battlefield 2*. Mesh's warranty is the best here, as it includes three years of onsite cover.

PERFORMANCE

The Xtreme CSX produced the second-best 2D benchmark result in the group, with a score of 165 overall in the *Shopper* tests. This is due to its speedy dual-core AMD Athlon 64 X2 4600+ processor. Each core runs as fast as the quickest single-core processor in the group.

The nVidia 7800 GTX graphics card blasted through our standard Doom 3 benchmark at 91.1fps. This is a good score, but it's still some way behind the fastest PCs in this group. It ran our native resolution test at 69fps.

VERDICT

Mesh's PC is very fast in Windows and reasonably powerful in 3D games. If you want a gaming PC with a comprehensive warranty, this is the one to pick, but otherwise gamers should choose a system with a bit more 3D power.



Powerful in Windows; cool chassis; great warranty



Uninspiring 3D performance

SPECIFICATIONS AMD Athlon 64 X2 4600+ processor, 1GB RAM, 250GB hard disk, 256MB nVidia GeForce 7800 GTX graphics, DVD+/-RW +/-DL, DVD-ROM, 19" LCD



PC NEXTDAY Zoostorm 5-7401 Gaming PC



RATING ★★★★★

PRICE £1499 inc VAT

SUPPLIER www.pcnextday.co.uk

DETAILS www.pcnextday.co.uk

You get two of everything with this PC: two hard disks, two graphics cards and two plastic horns.

FEATURES

PC Nextday's case isn't really to our taste: its red eyes and plastic horns were the subject of derision in the *Shopper* Labs. When we looked inside, however, we were far more impressed.

The 5-7401 uses two nVidia GeForce 7800 GT graphics cards connected using SLI in the new ECS KN1 Extreme SLI motherboard. You also get two Maxtor 200GB hard disks in a RAID 0 array. This helps games load faster, but if one disk fails you'll lose all your data.

The 19" AOC monitor has a slim bezel and performed well in most of our image tests, although its backlighting was slightly uneven. The Sound Blaster Audigy ZS card and set of Creative 7.1 surround-sound speakers make 3D games sound more realistic. The wireless mouse and keyboard are less impressive, and gamers will want to buy a decent wired set.

PERFORMANCE

The Athlon 64 4000+ processor used here is the most powerful single-core chip in the group. It fell behind dual-core processors in our video-encoding test, but in most tasks and all games it's one of the fastest here. It scored 126 overall in our *Shopper* benchmarks.

In 3D tests the 5-7401 left the competition in its wake. It ran our Doom 3 test at 116.8fps and managed 97.5fps at the monitor's native resolution. It will run any game in glorious detail.

VERDICT

This is the fastest PC in this group for playing 3D games, and its only real flaw is a keyboard and mouse set that's not suited to gaming. If you want a PC that will storm through the latest 3D games for some time, it's the one to buy.



Incredible 3D power; RAID array



Tacky case; single-core processor; poor keyboard

SPECIFICATIONS AMD Athlon 64 4000+ processor, 1GB RAM, 2x 200GB hard disks, 2x 256MB nVidia GeForce 7800 GT graphics, DVD+/-RW DL, DVD-ROM, 19" LCD



WATFORD Aries PowerXS 6446 X2 SLI

RATING ★★★★★

PRICE £1,499 inc VAT

SUPPLIER Watford 08700 270900

DETAILS www.savastore.com

Watford's PowerXS 6446 is astonishingly fast in applications that can use its dual-core processor, but it's outperformed elsewhere.

FEATURES

Watford's Coolermaster case is well designed. It feels very solid, has plenty of room inside for future upgrades and looks pretty cool in an understated way.

Like the PC Nextday system, this PC uses two hard disks in a RAID 0 array. This makes games load faster, but you will lose all your data if one should fail. The monitor is less impressive. It's easily the least attractive in the group and had difficulty displaying our colour wheel test accurately. It lacks definition in dark areas, which is annoying during games such as *Doom 3*, and had a slight blue cast that we had to remove manually using the onscreen menus.

A Sound Blaster Audigy ZS card is included, along with a set of Creative 6.1 surround-sound speakers. The Saitek joypad is useful, but the wireless keyboard and mouse are not ideal.

PERFORMANCE

Watford's AMD Athlon 64 X2 4600+ processor is the joint fastest here, and combined with 1GB of RAM and the fast hard disk array it produced the best scores in the *Shopper* benchmarks. It scored 173 overall.

For 3D power the PowerXS uses nVidia's latest graphics card, the GeForce 7800GTX. This isn't as fast as the two-card systems PC Nextday and Demonite use or the overclocked card in the Gladiator, but it still pumped out 94.1fps in our Doom 3 test.

VERDICT

Watford's PC is extremely fast in applications that can use its dual-core processor, but its performance in games is less remarkable and its monitor is below the standard we would expect to see with a gaming PC.



Fast dual-core processor; RAID array



Average monitor and 3D power

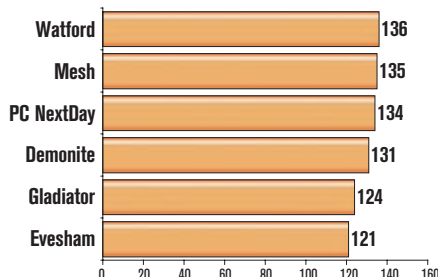
SPECIFICATIONS AMD Athlon 64 X2 4600+ processor, 1GB RAM, 2x 250GB hard disks, 256MB nVidia GeForce 7800 GTX graphics, DVD+/-RW DL, DVD-ROM, 19" LCD



BENCHMARKS

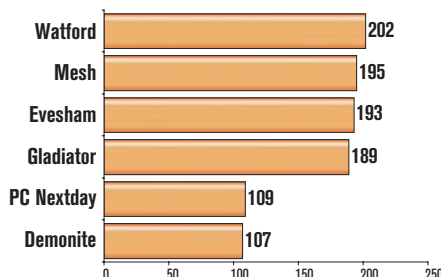
2D Performance **Shopper application tests**

Image-Editing Test



SETTINGS We run our application tests at 1,024x768 resolution and in 32-bit colour
WEB www.computershopper.co.uk

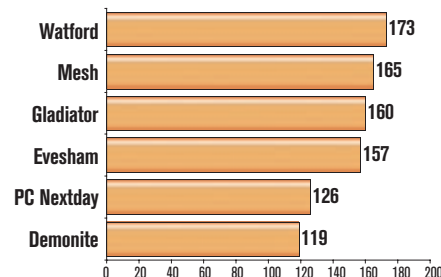
Video-Encoding Test



Computer Shopper's 2D benchmarks are designed to show how PCs stand up to the toughest tasks Windows can throw at them. Today's PCs have no problem running office applications such as Word and Excel, so we chose to focus our tests on areas where you could experience difficulties.

In version 1.0 there are three scripts. Our image-editing test simulates a session of photo enhancement using Paint Shop Pro, culminating with the memory-intensive composition of a

Overall

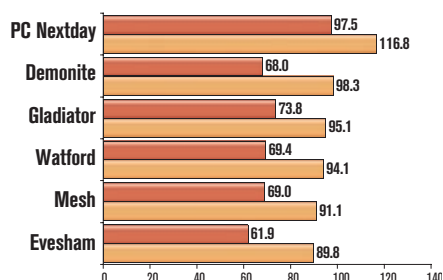


panorama from a set of digital snaps. Encoding a short video to MPEG-2 format is an extremely processor-intensive task, and one that anyone interested in transferring home videos to DVD will have to tackle. Finally, a set of MP3s is generated by ripping an audio CD.

We compiled the tests with the help of our sister magazine for performance computing, *Custom PC*. Figures are relative to a reference Evesham Athlon 64 3500+ system, which scores 100 in all tests.

3D Performance **Doom 3/3DMark03**

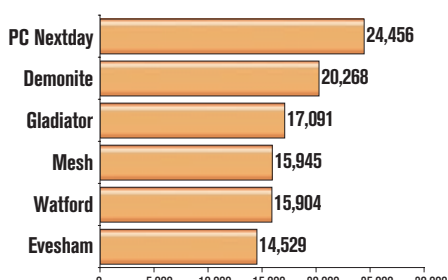
Doom 3 (fps) Native resolution



SETTINGS 1,024x768 resolution, high quality, 4x AA
WEB www.doom3.com

We run a timed demo in Doom 3 to test whether a PC has the power needed to play cutting-edge 3D games with ease. A good score here means that it should cope with any graphically intense 3D game.

3DMark03

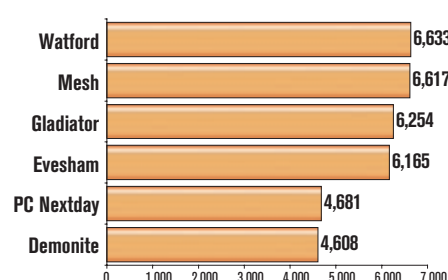


SETTINGS 1,024x768 resolution, 32-bit colour, default settings
WEB www.futuremark.com

3DMark03 is Futuremark's 3D benchmark. It comprises four game tests from four different genres. The workload is representative of games coming on to the market now.

PCMark04

PCMark04



SETTINGS 1,024x768 resolution, 32-bit colour, default settings
WEB www.futuremark.com

As well as our own benchmarks, we test all desktop and notebook PCs using Futuremark's PCMark04. You can download a free version of this benchmark from www.futuremark.com/download.

LABS VERDICT **GAMING PCs**

We had a lot of fun testing the PCs in this round-up. All the systems reviewed here are capable of playing today's games at impressive levels of detail with surround sound to make the experience even more realistic. Of the six, though, four stand out and one is a clear winner.

Demonite's OverX64 CrossFire produced the second-best 3D benchmark score in the group, thanks mainly to its two ATI graphics cards. Better still, its 20" LCD monitor displays more detail than any other screen here. Gladiator's Trident X2 3800

is almost as fast in our 3D tests and has a dual-core processor, but it's the only PC here without an onsite warranty.

Mesh's Xtreme CSX uses an incredibly fast dual-core processor. It's fast in applications that use both cores, but its 3D performance lags behind the best here. The clear winner is PC Nextday's 5-7401 Gaming PC. Its twin-card graphics system produces phenomenal frame rates in today's games, and it has no serious weaknesses elsewhere. It's the best PC here for gaming enthusiasts, and it wins our Best Buy award.

PC NEXTDAY **Zoostorm 5-7401**





MANUFACTURER	DEMONITE	EVESHAM	GLADIATOR	MESH	PCNEXTDAY	WATFORD
Model	OverX64 CrossFire	Axis 64 Decimator GT	Trident X2 3800 Platinum Package	Xtreme CSX	Zoostorm 5-7401 Gaming PC	Aries PowerXS 6446 X2 SLI
Rating	★★★★	★★★	★★★★	★★★★	★★★★★	★★★
Processor	AMD Athlon 64 3800+	AMD Athlon 64 X2 4200+	AMD Athlon 64 X2 3800+	AMD Athlon 64 X2 4600+	AMD Athlon 64 4000+	AMD Athlon 64 X2 4600+
Processor speed	2.4GHz	2.2GHz	2.2GHz (overclocked)	2.4GHz	2.4GHz	2.4GHz
Processor socket	Socket 939	Socket 939	Socket 939	Socket 939	Socket 939	Socket 939
Level I cache	128KB	2x 128KB	2x 128KB	2x 128KB	128KB	2x 128KB
Level II cache	512KB	2x 512KB	2x 512KB	2x 512KB	1MB	2x 512KB
Memory installed	1GB	1GB	2GB	1GB	1GB	1GB
Memory type	PC3200	PC3200	PC3200	PC3200	PC3200	PC3200
Maximum memory	4GB	4GB	4GB	4GB	4GB	4GB
Motherboard	ATI RD480	MSI K8N SLI	Asus A8N-E	Asus A8N-SLI Deluxe	ECS KN1 SLI Extreme	Gigabyte GA-K8N Pro SLI
Motherboard chipset	Xpress 200	nVidia nForce4 SLI	nVidia nForce4	nVidia nForce4 SLI	nVidia nForce4 SLI	nVidia nForce4 SLI
Memory bus speed	200MHz	200MHz	200MHz	200MHz	200MHz	200MHz
BIOS type	AMI	Award	Award	Award	Award	Award
PORTS						
USB2 ports (front/rear)	2/4	2/4	2/4	2/6	4/4	2/6
FireWire ports (front/rear)	1/1	0/1	1/0	1/1	1/1	1x FW400/2x FW400 + 1x FW800
Networking	10/100/1,000	2x 10/100/1,000	10/100/1,000	10/100/1,000	1x 10/100, 1x 10/100/1,000	10/100/1,000
Legacy ports	2x PS/2	Parallel, 2x PS/2, Serial	Parallel, 2x PS/2	Parallel, 2x PS/2	Parallel, 2x PS/2	Parallel, 2x PS/2, Serial
INTERNAL EXPANSION						
Case	Midi tower	Midi tower	Midi tower	Midi tower	Midi tower	Midi tower
Case size HxWxD	459x236x494mm	443x227x501mm	545x204x510mm	446x223x534mm	450x228x489mm	438x199x480mm
PCI (free)	2 (1)	3 (2)	3 (1)	3 (1)	3 (0)	2 (0)
PCI-E x1 (free)	0 (0)	2 (1)	3 (2)	2 (0)	1 (1)	2 (1)
PCI-E x16 (free)	2 (0)	2 (1)	1 (0)	2 (1)	2 (0)	2 (1)
AGP (free)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Serial ATA (free)	4 (3)	4 (3)	4 (3)	8 (7)	6 (4)	4 (2)
Memory (free)	4 (2)	4 (2)	4 (2)	4 (2)	4 (2)	4 (2)
Drive bays 3 1/2" (free)	5 (4)	5 (4)	7 (5)	6 (4)	6 (2)	5 (3)
Drive bays 5 1/4" (free)	5 (4)	4 (2)	5 (4)	4 (1)	4 (2)	5 (3)
HARD DISK						
Model	Western Digital Caviar (WD2000JD)	Western Digital Caviar (WD3200JD)	Hitachi Deskstar (T7K250)	Maxtor MaXLine Plus II (7Y250M0)	2x Maxtor DiamondMax 10 (6L200M0)	2x Maxtor DiamondMax 10 (6L250S0)
Interface	SATA 150	SATA 150	SATA 300	SATA 150	SATA 150	SATA 150
Capacity	200GB	320GB	250GB	250GB	2x 200GB	2x 250GB
Spin speed	7,200rpm	7,200rpm	7,200rpm	7,200rpm	7,200rpm	7,200rpm
GRAPHICS						
Technology	PCI Express	PCI Express	PCI Express	PCI Express	PCI Express	PCI Express
Graphics card	ATI X850XT Master, ATI X850XT	Inno 3D GF 7800 GT	XFX GeForce 7800 GTX	Asus 7800 GTX	2x Inno 3D GF 7800 GT	Gigabyte 7800 GTX GV-NX78X256V-B
Graphics chipset	ATI Radeon X850XT	nVidia GeForce 7800 GT	nVidia GeForce 7800 GTX	nVidia GeForce 7800 GTX	nVidia GeForce 7800 GT	nVidia GeForce 7800 GTX
Graphics memory	2x 256MB	256MB	256MB	256MB	2x 256MB	256MB
Graphics/video ports	2x DVI, composite video out, S-video in/out, component video out	2x DVI, composite video in/out, S-video in/out, component video out	2x DVI, composite video in/out, S-video in/out, component video out	2x DVI, composite video in/out, S-video in/out, component video out	2x DVI, composite video in/out, S-video in/out, component video out	2x DVI, composite video in/out, S-video in/out, component video out
SOUND						
Sound card	Realtek ALC880	Sound Blaster Audigy 2 ZS	Realtek ALC850	nVidia MCP04	Sound Blaster Audigy 2 ZS	Sound Blaster Audigy 2 ZS
Sound card outputs	7.1 line out	7.1 line out, coaxial S/PDIF minijack out	7.1 line out, coaxial S/PDIF out, optical S/PDIF out	7.1 line out, coaxial S/PDIF out, optical S/PDIF out	7.1 line out, coaxial S/PDIF minijack out	7.1 line out, coaxial S/PDIF minijack out
Speakers	Creative Inspire P5800 5.1	Creative Inspire T7900 7.1	Creative Inspire T7900 7.1	Creative Inspire T7900 7.1	Creative Inspire T7900 7.1	Creative Inspire T6700 6.1
REMOVABLE DRIVES						
Floppy drive 3 1/2"	No	No	Yes	Yes	Yes	Yes
Memory card reader	No	No	CompactFlash, Secure Digital, MultiMedia Card, Memory Stick, Smart Media, MicroDrive	No	CompactFlash, Secure Digital, MultiMedia Card, Memory Stick, Smart Media, MicroDrive	CompactFlash, Secure Digital, MultiMedia Card, Memory Stick, Smart Media, MicroDrive
Optical drive	Sony DW-Q28A (16X DVD+R, 16X DVD-R, 8X DVD+RW, 8X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 48X CD-R, 48X CD-RW, 16X DVD-ROM, 48X CD-ROM)	Sony DW-D22A (16X DVD+R, 8X DVD-R, 4X DVD+RW, 4X DVD-RW, 24X DVD+R DL, 48X CD-R, 24X CD-RW, 12X DVD-ROM, 48X CD-ROM), Sony DDU 1615 (16X DVD-ROM, 48X CD-ROM)	NEC ND3540A (16X DVD+R, 16X DVD-R, 8X DVD+RW, 6X DVD-RW, 8X DVD+R DL, 6X DVD-R DL, 48X CD-R, 32X CD-RW, 16X DVD-ROM, 48X CD-ROM)	Sony DW-Q28A (16X DVD+R, 16X DVD-R, 8X DVD+RW, 8X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 48X CD-R, 48X CD-RW, 16X DVD-ROM, 48X CD-ROM), Sony DDU 1615 (16X DVD-ROM, 48X CD-ROM)	AOpen DUW1616 (16X DVD+R, 16X DVD-R, 4X DVD+RW, 4X DVD-RW, 4X DVD+R DL, 48X CD-R, 32X CD-RW, 16X DVD-ROM, 48X CD-ROM), AOpen DVD1648 (16X DVD-ROM, 48X CD-ROM)	LG GSA-4163B (16X DVD+R, 16X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 5x DVD-RAM, 40X CD-R, 24X CD-RW, 16X DVD-ROM, 40X CD-ROM), Sony DDU 1615 (16X DVD-ROM, 48X CD-ROM)
DISPLAY						
Size and technology	20" LCD	19" LCD	19" LCD	19" LCD	19" LCD	19" LCD
Model	NEC LCD2070NX	Viewsonic VX924	Sony SDM-HS95P	Viewsonic VX912	AOC LM928	BenQ FP937S
Response time	16ms	4ms	12ms	8ms	8ms	12ms
Inputs	D-sub, DVI, four-port USB hub	D-sub, DVI	D-sub, DVI	D-sub, DVI	D-sub, DVI	D-sub, DVI
OTHER HARDWARE						
Modem	No	No	No	Yes	No	Yes
Keyboard	Microsoft Internet Keyboard	Microsoft Wireless Multimedia Keyboard 1.0A	Saitek Backlit PC Gaming Keyboard	Logitech Cordless Internet Pro Keyboard	Microsoft Wireless Comfort Keyboard 1.0A	Microsoft Wireless Multimedia Keyboard 1.0A
Mouse	Microsoft Basic Optical Mouse 1.0A	Microsoft Wireless Optical Mouse 2.0A	Raptor gaming mouse	Logitech Cordless Optical Mouse	Microsoft Wireless Optical Mouse 2.0A	Microsoft Wireless Optical Mouse 2.0A
Keyboard/mouse rating	★★★★	★★★	★★★★★	★★★	★★	★★★
Extras	None	None	Raptor gaming mouse mat	Saitek Cyborg Evo Force Joystick	2x Genius MaxFire USB game pads, Speed i640 webcam	Saitek P2500 Rumble Force Gamepad
SOFTWARE						
Software included	Panda Antivirus Titanium 2004, Roxio Easy CD Creator Suite 7, CyberLink PowerDVD 5	Microsoft Works 8, BullGuard Firewall and Anti-virus Suite, Sonic Media Suite	Nero Suite 6.0, CyberLink PowerDVD, games bundle (three titles chosen at random from a list of recent releases)	Microsoft Works 8, CyberLink PowerDVD 6, CyberLink Power2Go 4, CyberLink PowerProducer 3, CyberLink PowerDirector 3, CyberLink PowerBackup 1.1, CyberLink PowerCinema 4, CyberLink Medi@Show 3	CyberLink PowerDVD 5, Nero 6, Video Studio	Microsoft Works 8, Panda Antivirus Titanium 2004, Roxio Easy CD Creator Suite 7, CyberLink PowerDVD 5
Operating system	Windows XP Home	Windows XP Home	Windows XP Home	Windows XP Home	Windows XP Home	Windows XP Home
Operating system restore option	Restore CD and partition	Restore CD	Windows CD	Restore CD	Windows CD	Restore CD and partition
BUYING INFORMATION						
Parts warranty	One year onsite	First and second year onsite, third year RTB	One year RTB	Three years onsite	One year onsite	One year onsite
Labour warranty	One year onsite, five years RTB	First and second year onsite, third year RTB	One year RTB	Three years onsite	One year onsite	One year onsite, five years RTB
Tech support times	9am-5pm Mon-Fri, 9am-1pm Sat	9am-5.30pm Mon-Sat	10am-6pm Mon-Fri, 10am-3pm Sat	9am-5.30pm Mon-Fri	9am-6pm Mon-Fri	9am-5pm Mon-Fri, 9am-1pm Sat
Company founded	1972	1983	1999	1987	1993	1972
Tech support staff	20	83	9	42	3	20
Employees	130	419	15	275	68	130
Price including delivery (inc VAT)	£1,499	£1,499	£1,499	£1,499	£1,499	£1,499
Price including delivery (ex VAT)	£1,275	£1,275	£1,275	£1,275	£1,275	£1,275
Contact	Watford Electronics	Evesham	Gladiator Computers	Mesh Computers	PC Nextday	Watford Electronics
Phone	08700 270900	08701 609500	08456 444666	08700 464747	Internet only	08700 270900
Web	www.savastore.com	www.evesham.com	www.gladiatorcomputers.com	www.meshcomputers.com	www.pcnextday.co.uk	www.savastore.com